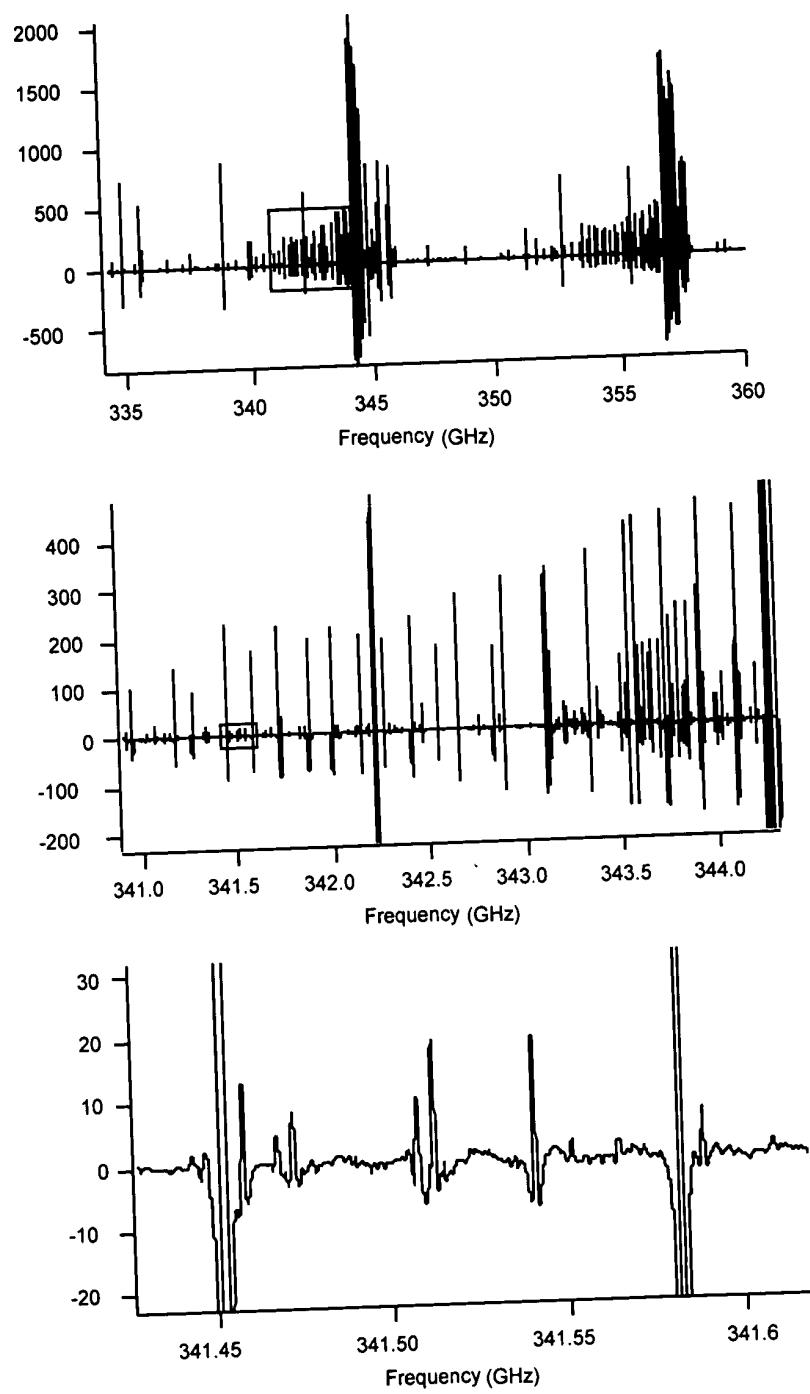
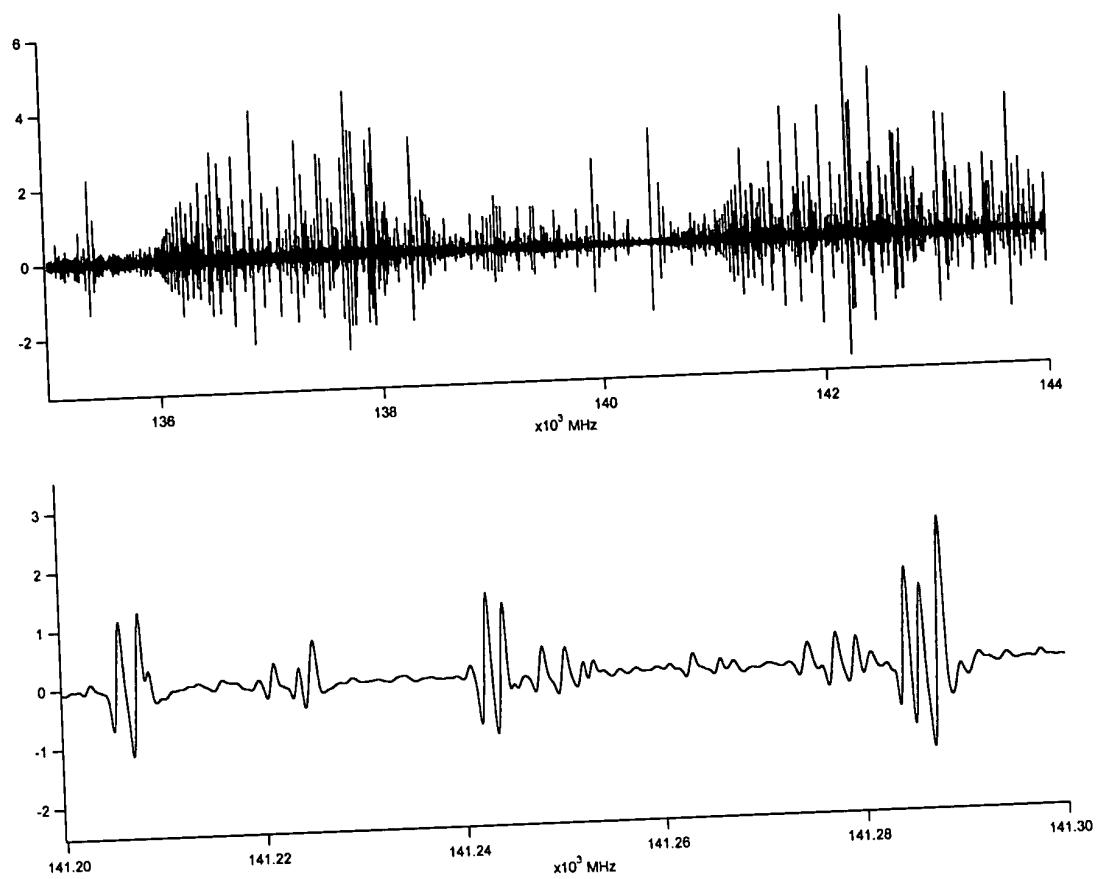


Figure 1



**Figure 2**



**Figure 3**

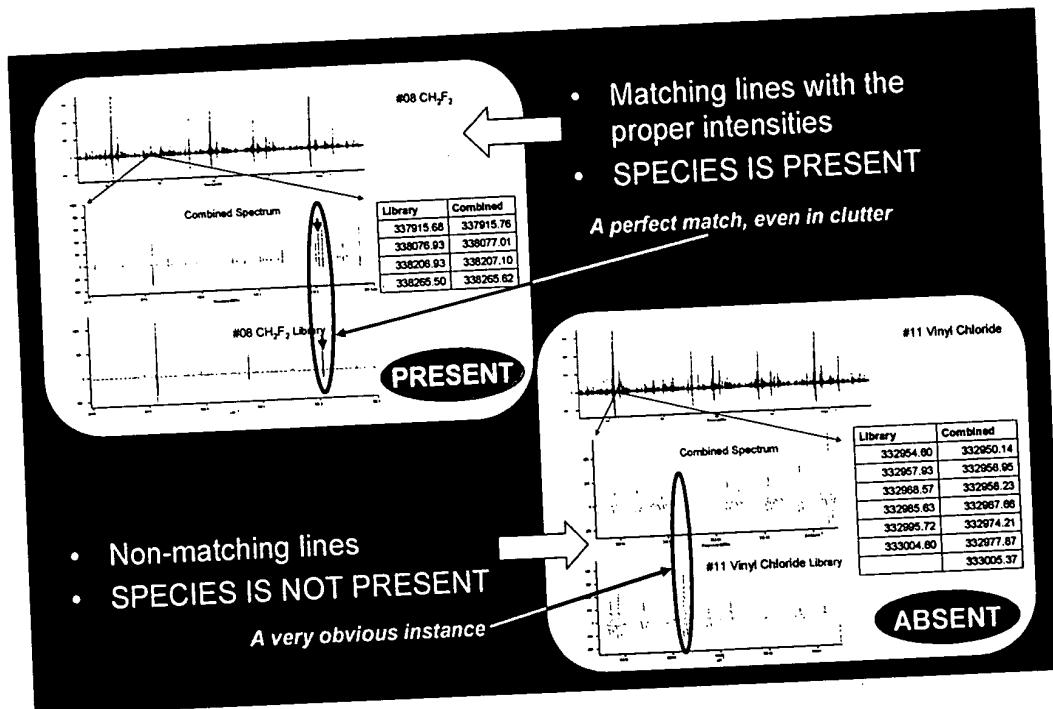


Figure 4

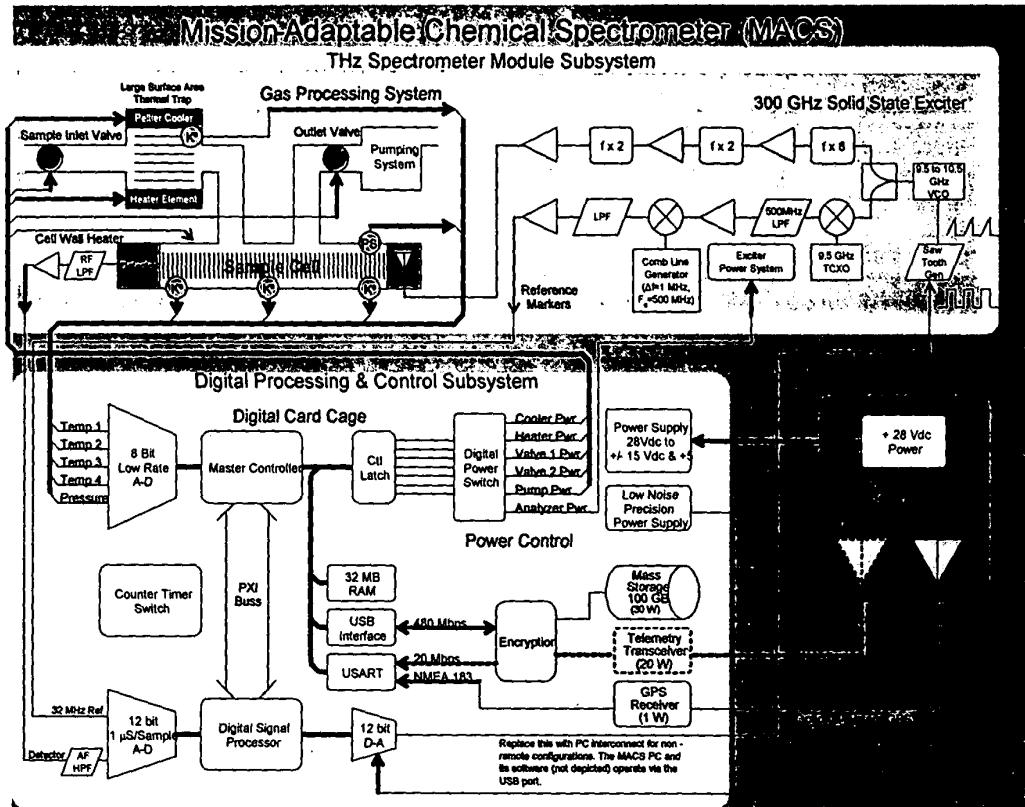


Figure 5

## Amplifier Based 330 GHz Source

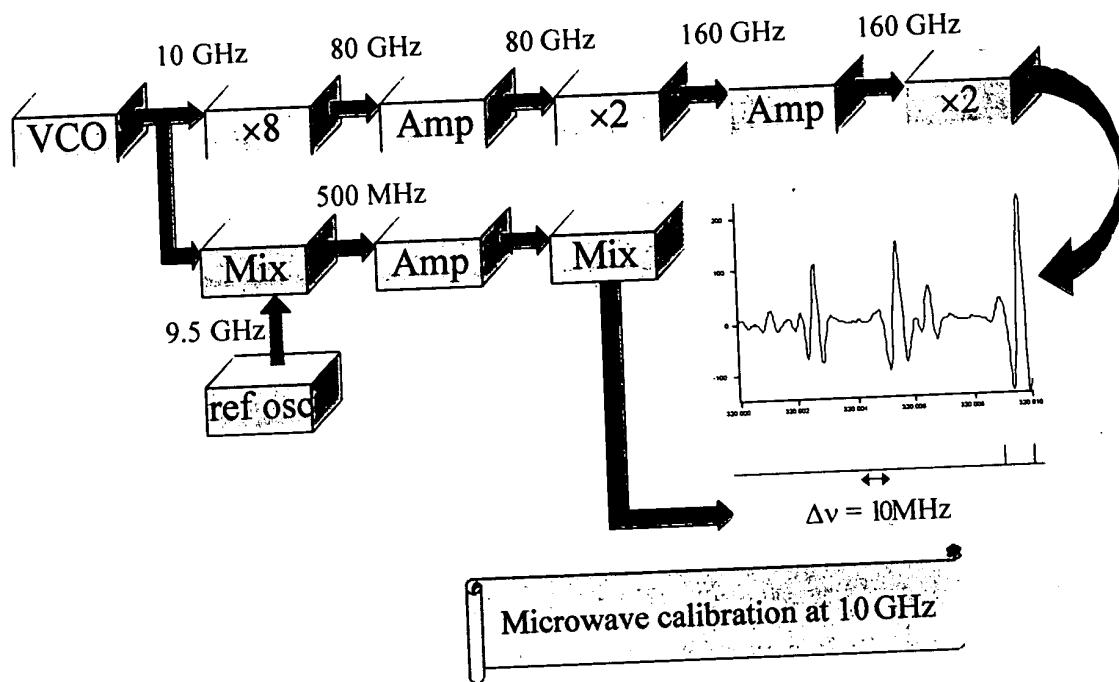
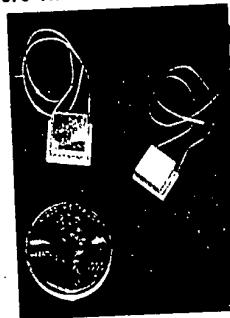


Figure 6

Sample supporting technology starting points...

MEMS Micro-Pumps and Valve Technology

Micro Thermoelectric Coolers



GAS COLLECTION AND FRACTIONATION CELL

HEAT EXCHANGER

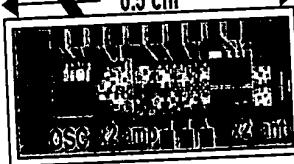
SAMPLE CELL  
(WAVEGUIDE)

VAR SPEED FAN  
OR MICRO FOREPUMP

MICRO VACUUM PUMP

0.5 cm

Sample cell with  
Peltier Wafers  
Rotating thermal  
control & cell pumping



Micro TeraHertz Detectors  
and Emitters

Figure 7

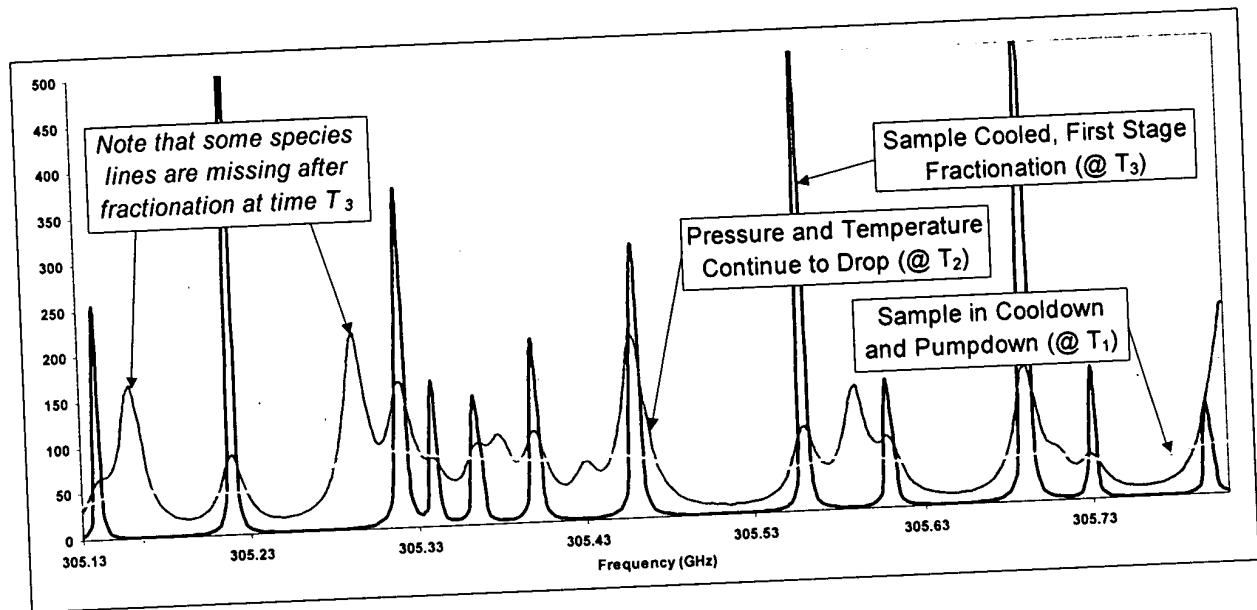


Figure 8

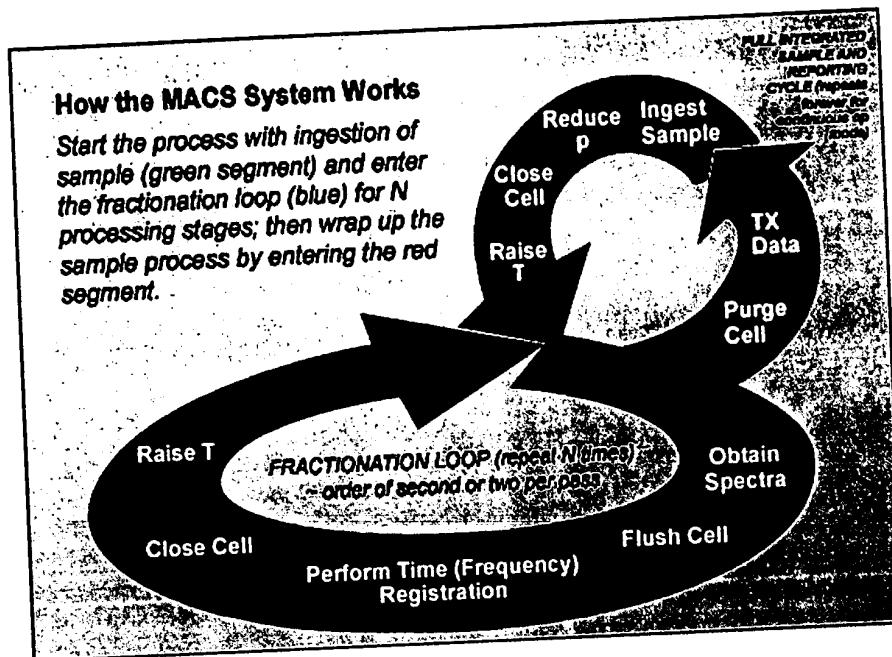


Figure 9

Figure 10

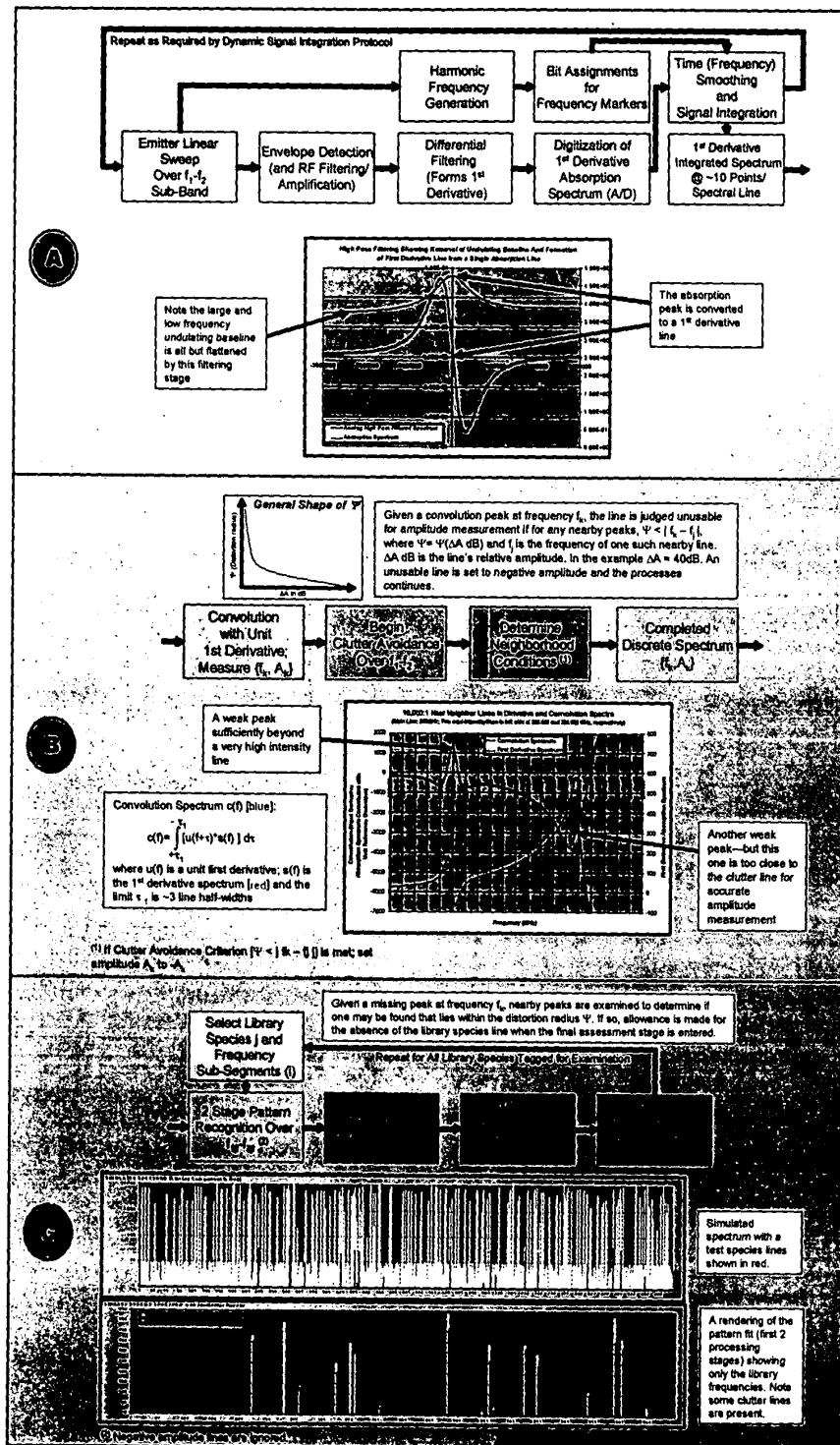


Figure 11

